

In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of producing a packet group for use in a trace stream of packets, comprising:

providing at least one header packet within the packet group;
and

arranging at least one plurality of further packets to form a corresponding at least one packet subgroup within the packet group;

wherein each of said further packets has an extension portion and a payload portion, wherein a field in the at least one header packet indicates a number of packet subgroups provided in the packet group, wherein a first of said further packets includes a first said extension portion, wherein a remainder of said further packets follow the first packet in said at least one packet subgroup and ~~are~~ contain a continuation of content contained in the first packet such that said at least one packet subgroup constitutes a single field in the trace stream, and wherein each of said remainder of said further packets has a second said extension portion that differs from said first extension portion.

2. (Previously presented) The method as recited in claim 1 wherein said packet group ends when a next packet of the trace stream that immediately follows a packet of the last packet subgroup does not have the second extension portion.

3. (Previously presented) The method as recited in claim 2 wherein said next packet begins a new packet group.

4. (Currently Amended) The method as recited in claim 1

wherein said number of packet subgroups, together with said first and second extension portions, permit ~~identification of~~ a position in the trace stream ~~that is associated with an implied header packet corresponding to~~ occupied by an immediately following packet group to be identified without using a header packet to identify said position.

5. (Canceled)

6. (Currently Amended) A processor test and debug system, the system comprising:

a host processing unit; and

a target processor, the target processor transmitting trace streams of packets to the host processing unit, the trace streams permitting the host processing unit to reconstruct the operation of the target processing unit, at least one of the trace streams comprising a sequence of packet groups, each said packet group including:

at least one header packet; and

at least one packet subgroup containing a plurality of further packets;

wherein each of said further packets has an extension portion and a payload portion, wherein a field in the at least one header packet indicates a number of packet subgroups provided in the associated packet group, wherein a first of said further packets includes a first said extension portion, wherein a remainder of said further packets follow the first packet in said at least one packet subgroup and ~~are~~ contain a continuation of content contained in the first packet such that said at least one packet subgroup constitutes a single field in the trace stream, and wherein each of said remainder of said further packets has a second said extension portion that differs from said first extension portion.

7. (Previously presented) The system as recited in claim 6 wherein one of said packet groups ends when a next packet of said at least one trace stream that immediately follows a packet of the last packet subgroup within said one packet group does not have the second extension portion.

8. (Previously presented) The system as recited in claim 7 wherein said next packet begins a new packet group.

9. (Currently Amended) A method for transferring information from a target processor to a host processing unit in a trace stream of packets, the method comprising:

dividing the packets into packet groups;

formatting each packet group to include at least one header packet; and

formatting each packet group to include at least one packet subgroup containing a plurality of further packets;

wherein each of said further packets has an extension portion and a payload portion, wherein a field in the at least one header packet indicates a number of packet subgroups provided in the associated packet group, wherein a first of said further packets includes a first said extension portion, wherein a remainder of said further packets follow the first packet in said at least one packet subgroup and ~~are~~ contain a continuation of content contained in the first packet such that said at least one packet subgroup constitutes a single field in the trace stream, and wherein each of said remainder of said further packets has a second said extension portion that differs from said first extension portion.

10. (Previously presented) The method as recited in claim 9 wherein each said packet group ends when a next packet of the trace

stream that immediately follows a packet of the last packet subgroup does not have the second extension portion.

11. (Canceled)